AMENDMENTS TO THE CLAIMS:

Please cancel Claims 2, 21, and 31 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1, 3, 5 through 16, 20, 22 through 26, 29, 30, and 32 through 36 to read as follows:

1. (Currently Amended) An automatic focus adjustment device comprising:

a light projector for illuminating an object;

an optical system for receiving an image of the object illuminated by said light projector; and

focus adjustment control means for adjusting a position of said optical system to an in-focus position by continuously moving said optical system in an optical axis direction on the basis of a specific component in an input video signal; ; and

~~wherein said focus adjustment control means controls an ON/OFF state of said light projector in accordance with a focus adjustment state with respect to the object~~

control means for controlling on ON/OFF state of said light projector in accordance with a focus adjustment state of said focus adjustment control means and inhibiting a movement of said optical system before said light projector is turned OFF in a case that said focus adjustment control means completes the adjusting during a time when said light projector is illuminating the object.

2. (Cancelled)

3. (Currently Amended) The device according to claim ~~2~~ 1, wherein said focus adjustment control means adjusts the position of said optical system to the in-focus position by moving said optical system in the optical axis direction to maximize a focus evaluation value obtained by extracting a high-frequency component in the input video signal.

4. (Original) The device according to claim 3, wherein said optical system includes a focus lens, and said focus adjustment control means moves said focus lens in the optical axis direction.

5. (Currently Amended) ~~An image sensing apparatus~~ The device according to claim 3, further comprising:

~~an automatic focus adjustment device of claim 3;~~

image sensing means for sensing an object image obtained via said optical system, and outputting the input video signal; and

recording means for recording a moving or still image of an object on a recording medium in correspondence with the input video signal.

6. (Currently Amended) The ~~apparatus~~ device according to claim 5, wherein said recording means records a still image corresponding to the input video signal on the recording medium upon completion of focus adjustment by said focus adjustment control means.

7. (Currently Amended) The device according to claim 3, wherein said light projector includes first and second light projection units, and

said focus adjustment control means holds said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by moving said optical system by an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and second light projection units, when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit.

8. (Currently Amended) ~~An image sensing apparatus~~ The device according to claim 7, further comprising:

~~an automatic focus adjustment device of claim 7;~~

image sensing means for sensing an object image obtained via said optical system, and outputting the input video signal; and

recording means for recording a moving or still image of an object on a recording medium in correspondence with the input video signal.

9. (Currently Amended) The ~~apparatus~~ device according to claim 8, wherein said image sensing apparatus records a still image corresponding to the input video signal on the recording medium upon completion of focus adjustment by said focus adjustment control means.

10. (Currently Amended) The device according to claim 3, wherein said light projector includes first and second light projection units,

said device further comprises storage means for pre-storing information related to an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and second light projection units, and

said focus adjustment control means holds said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by acquiring, from said storage means, an offset amount of an in-focus position corresponding to brightness of the object obtained upon turning on said first light projection unit when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and moving said optical system by the acquired offset amount.

11. (Currently Amended) ~~An image sensing apparatus~~ The device according to claim 10, further comprising:

~~an automatic focus adjustment device of claim 10;~~

image sensing means for sensing an object image obtained via said optical system, and outputting the input video signal; and

recording means for recording a moving or still image of an object on a recording medium in correspondence with the input video signal.

12. (Currently Amended) The ~~apparatus~~ device according to claim 11, wherein said image sensing apparatus records a still image corresponding to the input video signal on the recording medium upon completion of focus adjustment by said focus adjustment control means.

13. (Currently Amended) The device according to claim 3, wherein said light projector includes first and second light projection units, and said optical system includes a focus lens and zoom lens,

said device further comprises storage means for pre-storing information related to an offset amount of an in-focus position of said focus lens upon movement of said zoom lens, and

said focus adjustment control means holds said optical system at the in-focus position with respect to the object by acquiring, from said storage means, an offset amount of an in-focus position corresponding to the current position of said zoom lens when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and moving said focus lens by the acquired offset amount.

14. (Currently Amended) ~~An image sensing apparatus~~ The device according to claim 13, further comprising:

~~an automatic focus adjustment device of claim 13;~~

image sensing means for sensing an object image obtained via said optical system, and outputting the input video signal; and

recording means for recording a moving or still image of an object on a recording medium in correspondence with the input video signal.

15. (Currently Amended) The ~~apparatus~~ device according to claim 14, wherein said image sensing apparatus records a still image corresponding to the input video signal on the recording medium upon completion of focus adjustment by said focus adjustment control means.

16. (Currently Amended) An image sensing apparatus comprising:

a light projector for illuminating an object;

an optical system for receiving an image of the object illuminated by said light projector;

image sensing means for sensing an object image obtained via said optical system, and outputting the input video signal;

focus adjustment control means for adjusting a position of said optical system to an in-focus position by moving said optical system in an optical axis direction on the basis of a specific component in the video signal output from said image sensing means; and

recording means for recording a moving or still image of an object on a recording medium in correspondence with the ~~input~~ video signal,

wherein said focus adjustment control means turns on/off said light projector in synchronism with a vertical sync signal of the video signal and sets an ON period of said light projector at an integer multiple of a vertical sync period of the video signal upon executing focus adjustment with respect to the object.

17. (Original) The apparatus according to claim 16, wherein said focus adjustment control means turns on/off said light projector in synchronism with the vertical sync signal of the video signal, sets an ON period of said light projector twice the vertical sync period of the video signal, and sets an OFF period of said light projector to be equal to the vertical sync period of the video signal, upon executing focus adjustment with respect to the object.

18. (Original) The apparatus according to claim 17, wherein said focus adjustment control means adjusts the position of said optical system to the in-focus position in accordance with an average value of focus evaluation values obtained during a period three times the vertical sync period.

19. (Original) The apparatus according to claim 16, wherein upon completion of focus adjustment for the object while said light projector is ON, said focus adjustment control means inhibits said optical system from being driven before said light projector is turned off.

20. (Currently Amended) A focus adjustment method having the focus adjustment control step of adjusting a position of an optical system to an in-focus position by continuously moving said optical system, which receives an image of an object illuminated by a light projector, in an optical axis direction of said optical system on the basis of an input video signal, comprising the step of:

controlling an ON/OFF state of said light projector in accordance with a focus adjustment state ~~with respect to the object~~ of said optical system and inhibiting a movement of said optical system before said light projector is turned OFF in a case that the adjusting is completed during a time when said light projector is illuminating the object.

21. (Cancelled)

22. (Currently Amended) The method according to claim ~~21~~ 20, wherein the position of said optical system is adjusted to the in-focus position by moving said optical system in the optical axis direction to maximize a focus evaluation value obtained by extracting a high-frequency component in the input video signal.

23. (Currently Amended) The method according to claim 22, wherein said light projector includes first and second light projection units, and

the focus adjustment control step includes the step of holding said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by moving said optical system by an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and second light projection units, when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit.

24. (Currently Amended) The method according to claim 22, wherein said light projector includes first and second light projection units,

information related to an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and second light projection units is pre-stored in a memory, and

the focus adjustment control step includes the steps of:

holding said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by acquiring, from said memory, an offset amount of an in-focus position corresponding to brightness of the object obtained upon turning on said first light projection unit when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and

moving said optical system by the acquired offset amount.

25. (Currently Amended) The method according to claim 22, wherein said light projector includes first and second light projection units, and said optical system includes a focus lens and zoom lens,

information related to an offset amount of an in-focus position of said focus lens upon movement of said zoom lens is pre-stored in a memory, and

the focus adjustment control step includes the step of holding said optical system at the in-focus position with respect to the object by acquiring, from said memory, an offset amount of an in-focus position corresponding to the current position of said zoom lens when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and moving said focus lens by the acquired offset amount.

26. (Currently Amended) A focus adjustment method for an image sensing apparatus which illuminates an object by a light projector, senses an image of the illuminated object input via an optical system using an image sensing element, and records a moving or still image of the object on a recording medium in correspondence with a video signal output from said image sensing element,

wherein ~~the~~ a focus adjustment control step of adjusting a position of said optical system to an in-focus position with respect to the object includes the step of turning on/off said light projector in synchronism with a vertical sync signal of the video signal when said optical system is moved in an optical axis direction to maximize a focus evaluation value obtained by extracting a high-frequency component from the video signal output from said image

sensing element, and setting an ON period of said ~~optical system~~ light projector at an integer multiple of a vertical sync period of the video signal.

27. (Original) The method according to claim 26, wherein the focus adjustment control step includes the step of turning on/off said light projector in synchronism with the vertical sync signal of the video signal, setting an ON period of said light projector twice the vertical sync period of the video signal, and setting an OFF period of said light projector to be equal to the vertical sync period of the video signal.

28. (Original) The method according to claim 27, wherein the focus adjustment control step includes the step of adjusting the position of said optical system to the in-focus position in accordance with an average value of focus evaluation values obtained during a period three times the vertical sync period.

29. (Currently Amended) The method according to claim 26, wherein upon completion of focus adjustment for the object while said light projector is ON, the focus adjustment control step includes the step of inhibiting said optical system from being driven before said light projector is turned off.

30. (Currently Amended) A computer-readable storage medium which stores a program code of automatic focus adjustment for adjusting a position of an optical system, which receives an image of an object illuminated by a light projector, to an in-focus position by

continuously moving said optical system in an optical axis direction of said optical system on the basis of an input video signal, having:

a code of a control ~~the focus adjustment~~ step of controlling an ON/OFF state of said light projector in accordance with a focus adjustment state of said optical system and inhibiting a movement of said optical system before said light projector is turned OFF in a case that the adjusting is completed during a time when said light projector is illuminating ~~for~~ the object.

31. (Cancelled)

32. (Currently Amended) The method according to claim ~~31~~ 30, wherein the code of the ~~focus adjustment~~ control step adjusts the position of said optical system to the in-focus position by moving said optical system in the optical axis direction to maximize a focus evaluation value obtained by extracting a high-frequency component in the input video signal.

33. (Currently Amended) The medium according to claim ~~31~~ 30, wherein said light projector includes first and second light projection units, and

the code of the ~~focus adjustment~~ control step holds said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by moving said optical system by an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and

second light projection units, when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit.

34. (Currently Amended) The medium according to claim ~~31~~ 30, wherein said light projector includes first and second light projection units, and

the code of the ~~focus adjustment~~ control step holds said optical system at the in-focus position with respect to the object even when said second light projection unit is turned on, by acquiring, from a memory which pre-stores information related to an offset amount of an in-focus position of said optical system arising from different characteristics of light beams emitted by said first and second light projection units, an offset amount of an in-focus position corresponding to brightness of the object obtained upon turning on said first light projection unit when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and moving said optical system by the acquired offset amount.

35. (Currently Amended) The medium according to claim ~~31~~ 30, wherein said light projector includes first and second light projection units, and said optical system includes a focus lens and zoom lens, and

the code of the ~~focus adjustment~~ control step holds said optical system at the in-focus position with respect to the object by acquiring, from a memory which pre-stores information related to an offset amount of an in-focus position of said focus lens upon movement of said zoom lens, an offset amount of an in-focus position corresponding to the current position

of said zoom lens when the position of said optical system is adjusted to the in-focus position with respect to the object illuminated by ~~turning on~~ said first light projection unit, and moving said focus lens by the acquired offset amount.

36. (Currently Amended) A computer-readable storage medium which stores a program code of automatic focus adjustment in an image sensing apparatus which illuminates an object by a light projector, senses an image of the illuminated object input via an optical system using an image sensing element, and records a moving or still image of the object on a recording medium in correspondence with a video signal output from said image sensing element,

wherein a code of the focus adjustment step of adjusting a position of said optical system to an in-focus position with respect to the object turns on/off said light projector in synchronism with a vertical sync signal of the video signal when said optical system is moved in an optical axis direction to maximize a focus evaluation value obtained by extracting a high-frequency component from the video signal output from said image sensing element, and sets an ON period of said light projector ~~optical system~~ at an integer multiple of a vertical sync period of the video signal.